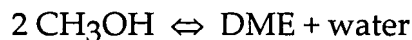


AMENDMENTS TO THE CLAIMS

Claims 1-11. (Canceled)

12. (Currently amended) A method of operating a compression ignition engine on an oxygenated diesel fuel composition comprising methanol, dimethyl ether and water, said method comprising the step of injecting the fuel into the combustion chamber of the engine and combusting the fuel with air, wherein ~~the concentration of methanol is between 5 and 50% w/w, the concentration of dimethyl ether is between 30 and 68% w/w, and the concentration of water is between about 14 and 40% w/w, and wherein the air for combustion is preheated to a temperature of at least 60°C, said fuel composition being obtainable by a process comprising the step of converting methanol containing up to 20% w/w of water and up to 20% w/w of ethanol or higher alcohol in a catalytic dehydration reaction, the methanol being converted to dimethyl ether~~ the fuel is obtained by dehydrating methanol containing from 0 and up to 20% w/w water by converting 50 to 95% of the methanol to dimethyl ether and water according to the reaction scheme:



resulting in equilibrium mixtures containing 30 to 68% w/w dimethyl ether, the equilibrium mixtures having at least 5% w/w methanol and at most 50% w/w methanol, and the balance being at least 14% w/w water and at most 40% w/w water;

wherein the dehydrating takes place on board in a vehicle at a temperature between 200°C and 450°C and at a pressure between 10 and 400 bar; and

wherein the air for combustion is preheated to a temperature of at least 60°C

~~using a catalytic converter on board of a vehicle, wherein the dehydration temperature is between 200°C and 450°C and wherein the pressure is between 10 and 400 bar.~~

13. (Previously presented) The method of claim 12, wherein the combustion air is preheated to a temperature of at least 100°C.

14. (Previously presented) The method of claim 12, wherein the combustion air is preheated by exchange with exhaust gas.

15. (Previously presented) The method of claim 12, applied to vehicles, ships, trains or in stationary diesel engines for power and heat supply.

16. (Currently amended) The method of claim 12, wherein the equilibrium mixtures contain 48 to 60% w/w dimethyl ether, the equilibrium mixtures having at least 5% w/w methanol and at most 20% w/w methanol, and the balance being at least 20% w/w water and at most 40% w/w water ~~the concentration of dimethyl ether is between 30 and 60% w/w.~~

17. (New) The method of claim 12, wherein the methanol contains up to 20% w/w of ethanol or higher alcohols.